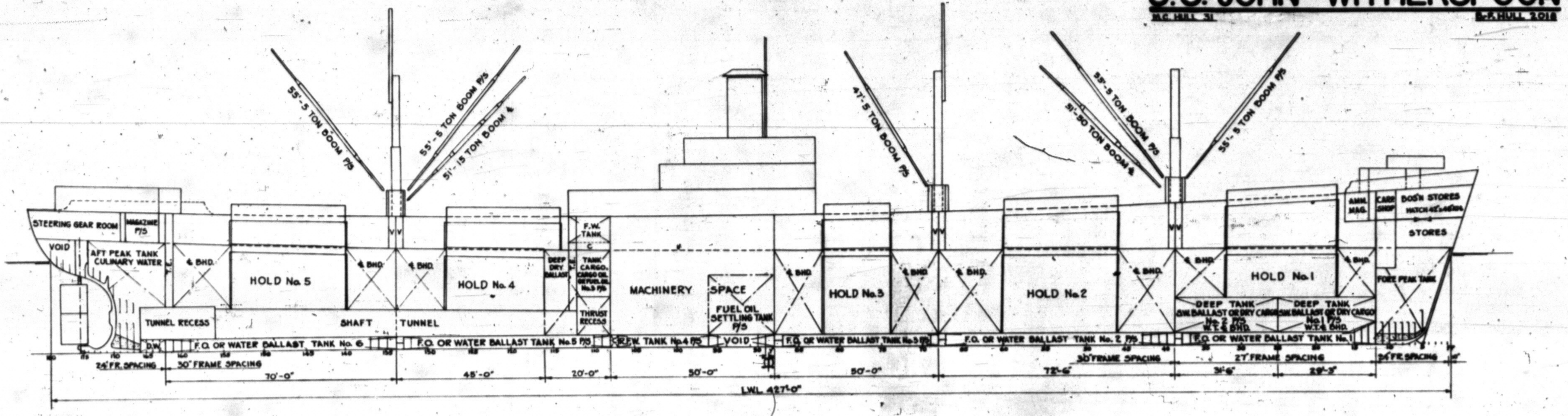
US 474

S.S. JOHN WITHERSPOON

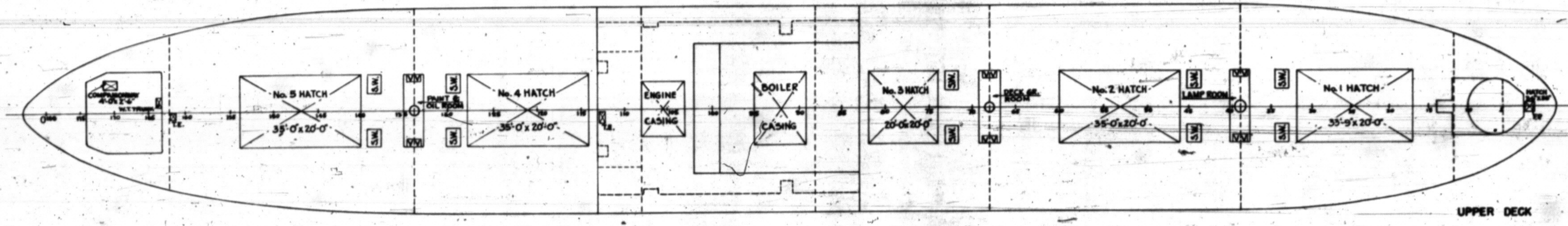
M.C. HULL 31

B-F HULL 2018

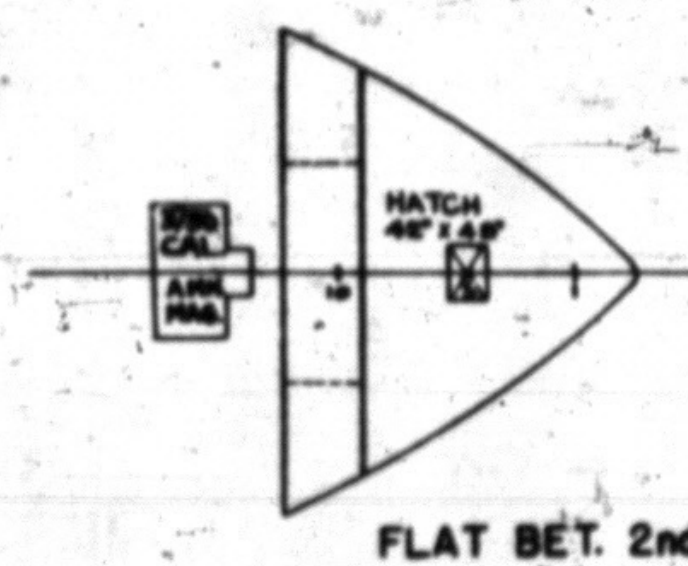


ABBREVIATION

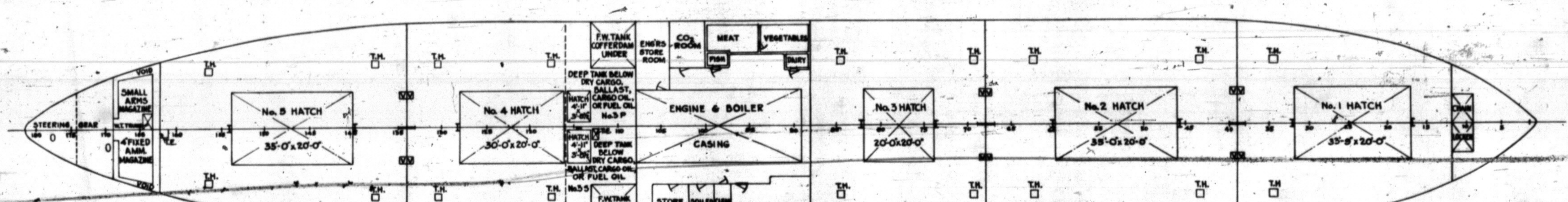
T.E. – TUNNEL ESCAPE
T.H. – TRIMMING HATCH
D.W. – DRAIN WELL
S.W. – STEAM WINCH
V. – VENT TRUNK
C. – COFFERDAM


No. 5 HATCH 35'-0" x 20'-0"
No. 4 HATCH 35'-0" x 20'-0"
ENGINE CASING
BOILER CASING
No. 3 HATCH 20'-0" x 20'-0"
No. 2 HATCH 35'-0" x 20'-0"
LAMP ROOM
No. 1 HATCH 35'-9" x 20'-0"
S.W.

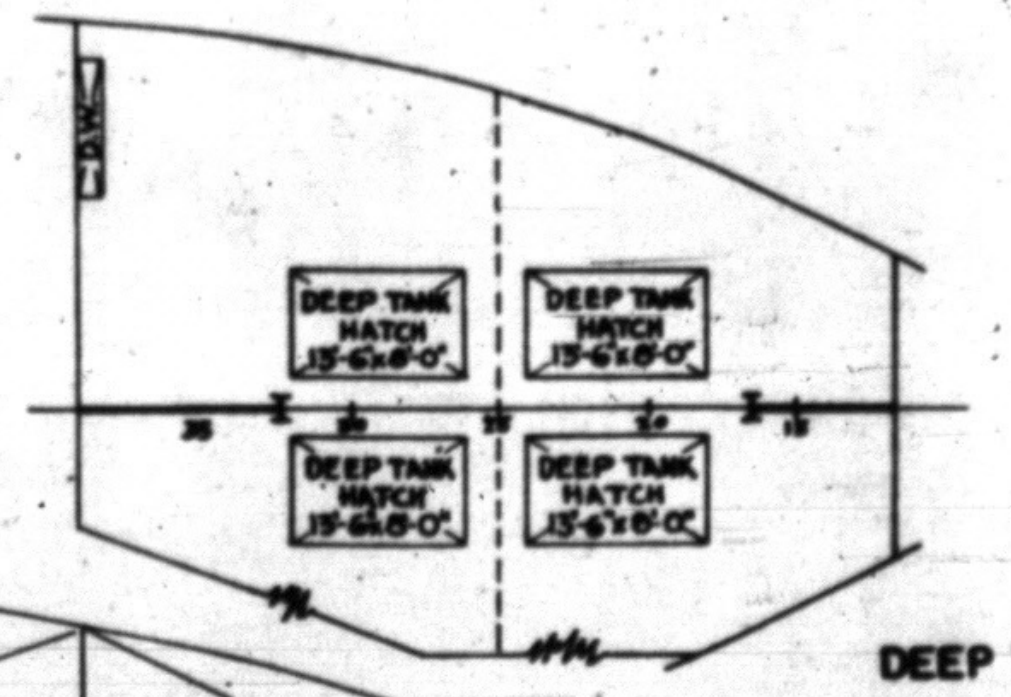
UPPER DECK



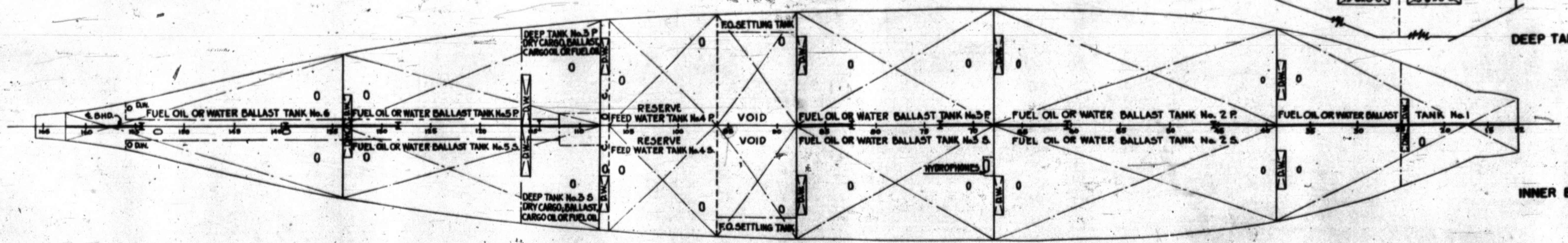
FLAT BET. 2nd & UPPER DKS.


STEERING GEAR
SMALL ARMS MAGAZINE
FIXED AMM. MAGAZINE
T.H.
No. 5 HATCH 35'-0" x 20'-0"
No. 4 HATCH 35'-0" x 20'-0"
F.W. TANK COFFERDAM UNDER
DEEP TANK BELOW DRY CARGO, BALLAST, CARGO OIL OR FUEL OIL No. 3 P.
DEEP TANK BELOW DRY CARGO, BALLAST, CARGO OIL OR FUEL OIL No. 3 S.
F.W. TANK COFFERDAM UNDER
ENG'RS STORE ROOM
CO2 ROOM
MEAT
VEGETABLES
FISH
DAIRY
ENGINE & BOILER CASING
STORE ROOM
LINEN
DRY STORES
No. 3 HATCH 20'-0" x 20'-0"
No. 2 HATCH 35'-0" x 20'-0"
No. 1 HATCH 35'-9" x 20'-0"

SECOND DECK



DEEP TANK TOP


FUEL OIL OR WATER BALLAST TANK No. 6
FUEL OIL OR WATER BALLAST TANK No. 5 P.
FUEL OIL OR WATER BALLAST TANK No. 5 S.
DEEP TANK No. 3 P. DRY CARGO, BALLAST, CARGO OIL OR FUEL OIL
DEEP TANK No. 3 S. DRY CARGO, BALLAST, CARGO OIL OR FUEL OIL
RESERVE FEED WATER TANK No. 4 P.
RESERVE FEED WATER TANK No. 4 S.
F.O. SETTLING TANK
VOID
VOID
F.O. SETTLING TANK
FUEL OIL OR WATER BALLAST TANK No. 3 P.
FUEL OIL OR WATER BALLAST TANK No. 3 S.
FUEL OIL OR WATER BALLAST TANK No. 2 P.
FUEL OIL OR WATER BALLAST TANK No. 2 S.
FUEL OIL OR WATER BALLAST
TANK No. 1
HYDROPHONES

INNER BOTTOM

CARGO

COMPARTMENT		GRAIN CAP.	BALE CAP.
HOLD No. 1		C.F.	C.F.
	HOLD	41257	36083
	TWEEN DECKS	43143	39565
HOLD No. 2			
	HOLD	98860	92008
	TWEEN DECKS	46744	42630
HOLD No. 3			
	HOLD	68459	59793
	TWEEN DECKS	27970	23904
HOLD No. 4			
	HOLD	58841	52574
	TWEEN DECKS	35277	29689
HOLD No. 5			
	HOLD	58620	51571
	TWEEN DECKS	34570	30864
DEEP TANKS	No. 1P.	3639	2729
" "	No. 1S.	3639	3004
" "	No. 2P.	7473	5294
" "	No. 2S.	7473	5578
" "	No. 3P.	13674	12506
" "	No. 3S.	13188	12024
	TOTAL	562827	499816

WATER BALLAST

TANK		CU. FT.	TONS @ 35 C.F.
FORE PEAK		5073	145
WATER BALLAST	No. 1	5029	144
" "	No. 2P.	5967	170
" "	No. 2S.	5967	170
" "	No. 3P.	4400	126
" "	No. 3S.	4365	125
" "	No. 5P.	4391	125
" "	No. 5P.	4391	125
" "	No. 6	4118	118
AFTER PEAK—CULINARY WATER		5438	155
DEEP TANKS	No. 1P.	3973	114
" "	No. 1S.	3973	114
" "	No. 2P.	7340	210
" "	No. 2S.	7340	210
" "	No. 3P.	13540	387
" "	No. 3S.	13065	373
	TOTAL	98370	2811

FRESH WATER

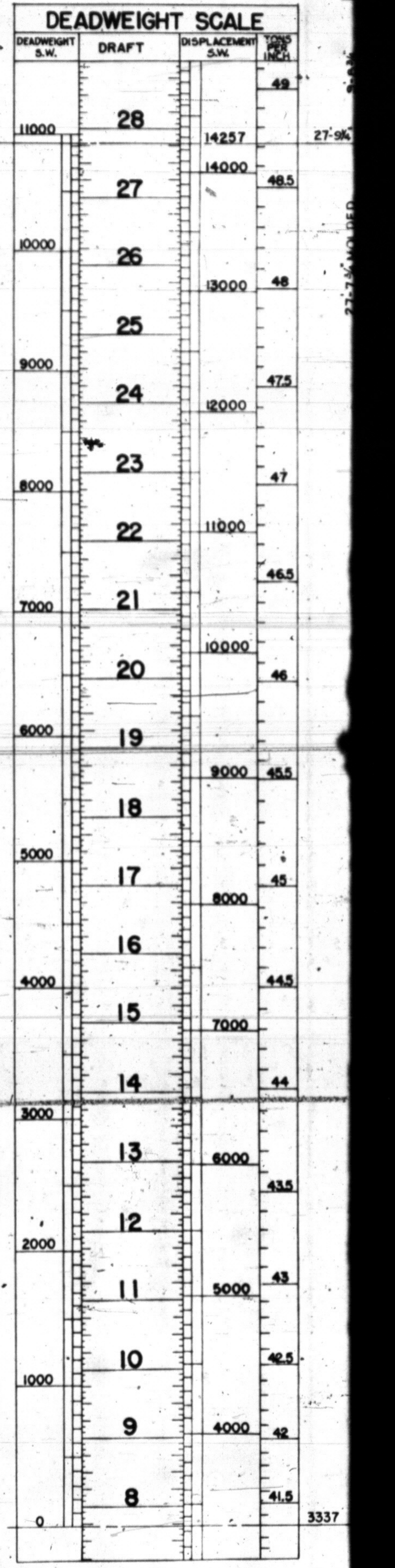
TANK		GAL'S	TONS @ 35 C.F.
RESERVE FEED	No. 4P.	17855	66
" "	No. 4S.	17855	66
FRESH WATER	FR. 108-113P.	7541	28
" "	FR. 108-113S.	7541	28
	TOTAL	50792	188

FUEL OIL

TANK		GAL'S	TONS @ 37.23 C.F.
FUEL OIL TANK	No. 1	36863	132
" " "	No. 2P.	43742	157
" " "	No. 2S.	43742	157
" " "	No. 3P.	32251	116
" " "	No. 3S.	31955	115
" " "	No. 5P.	32185	116
" " "	No. 5S.	32185	116
" " "	No. 6	30183	108
	TOTAL	283106	1017
F.O. SETTLING TANK	FR. 88-96P.	14083	51
" " "	FR. 88-96S.	14083	51
	TOTAL	28166	102
CARGO OIL OR FUEL OIL			
DEEP TANK	No. 3P.	99257	356
" "	No. 3S.	95772	344
	TOTAL	195029	700
	TOTAL (ALL F.O.)	506301	1819

STORES

STORE ROOM	CU. FT.
BOS'N. STORES ON 2nd DECK F.P. TO FR. 12	3034
BOS'N. STORES ON FLAT BET. 2nd & UPP. DKS.	3492
CABIN STORES 2nd DK. (FRS. 88-106)	4329
LINEN LOCKER	585
BONDED STORES	186
REFRIGERATED STORES:	
MEAT	801
FISH	173
VEGETABLES	768
DAIRY	176



PRINCIPAL DIMENSIONS

L.O.A. ------------------------ 441'-7½"
L.B.P. (25'-3¼" W.L.) ------------------------ 416'-0"
BREADTH, MLD. ------------------------ 56'-10¾"
BREADTH, EXTREME ------------------------ 57'-1½"
DEPTH TO UPPER DECK, MLD. ------------------------ 37'-4"
DEPTH TO SECOND DECK, MLD. ------------------------ 28'-7"
DRAFT ------------------------ 27'-9¼"

CAPACITIES & TYPES OF WINCHES
7"x12" DBL. GEARED WINCHES FOR 5 & 15 TON BOOMS
10½x12 " " WINCH FOR 50 TON BOOM

HEIGHTS OF MASTS

FIXED MAST ABOVE DECK	FOREMAST	40'-3 11/16"
" " " "	FR. 68	42'-11 3/16"
" " " "	FR. 134	42'-2 7/16"
TELESCOPIC " " "	FR. 68	62'-11 3/16"
" " " "	FR. 134	62'-2 7/16"

ENGINE

DIRECT ACTING CONDENSING THREE CYLINDER TRIPLE EXPANSION ENGINE DEVELOPING 2500 I.H.P. AT 76 R.P.M.

BOILERS

TWO MAIN BOILERS OF THE CROSS DRUM SECTIONAL SINUOUS HEADER STRAIGHT TUBE TYPE FITTED WITH SUPER HEATERS, BURNING BUNKER "C" FUEL OIL

Nº	ALTERATIONS	DATE	REMARKS
1	LENGTH OF HATCH Nº1 ON UPPER DK. & 2nd DK. CORRECTED TO 33'-9"	5-15-42 L.F.H.	

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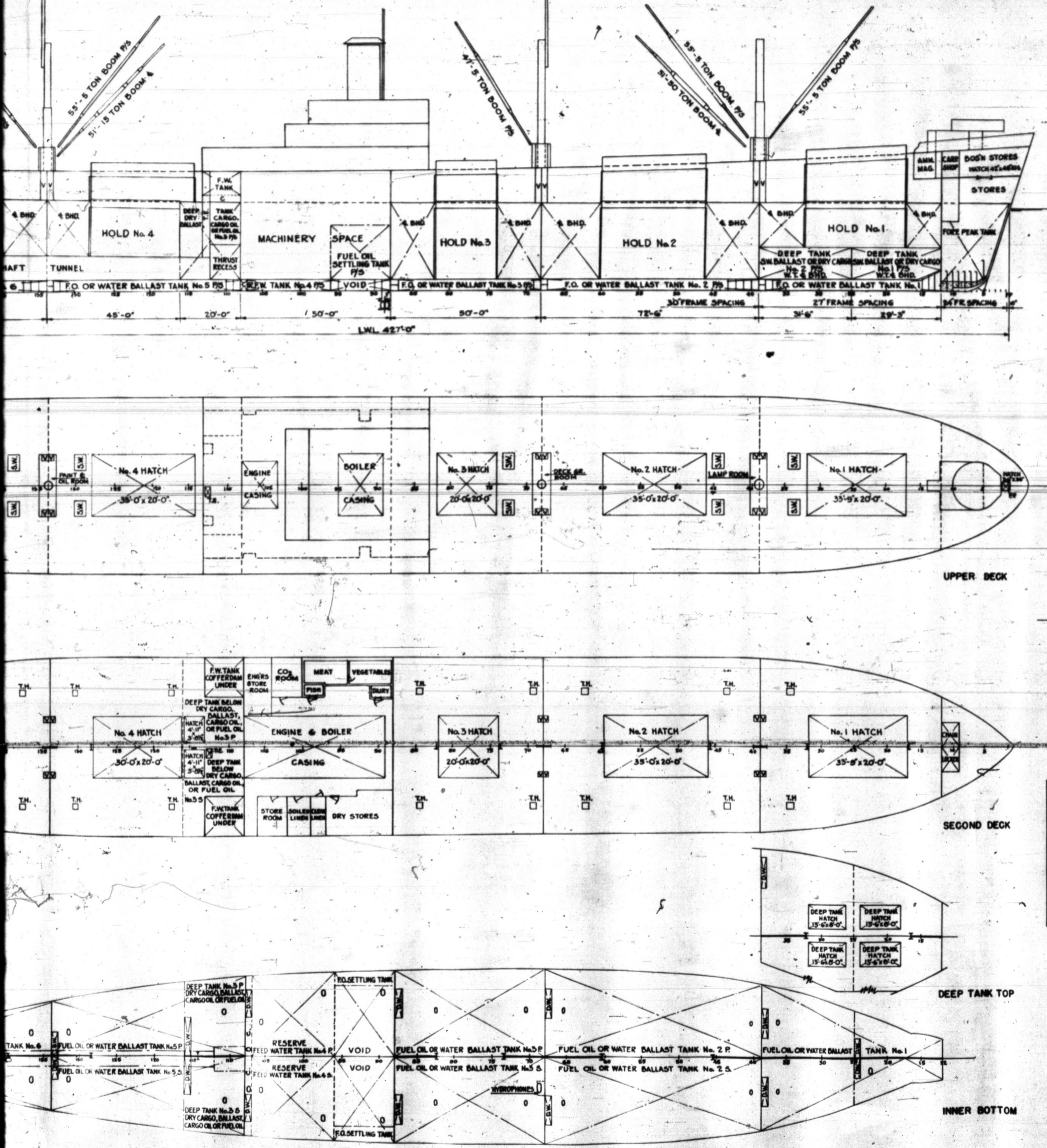
55'-5 TON BOOM P/S
51'-15 TON BOOM S
47'-5 TON BOOM P/S
58'-5 TON BOOM P/S
51'-50 TON BOOM S
55'-5 TON BOOM P/S
HOLD No. 4
F.W. TANK
DEEP DRY BALLAST
MACHINERY SPACE
FUEL OIL SETTLING TANK P/S
THRUST RECESS
HOLD No.3
HOLD No.2
HOLD No.1
DEEP TANK
BOS'N STORES
STORES
FORE PEAK TANK
TUNNEL
F.O. OR WATER BALLAST TANK No 5 P/S
F.W. TANK No.4 P/S
VOID
F.O. OR WATER BALLAST TANK No.3 P/S
F.O. OR WATER BALLAST TANK No. 2 P/S
F.O. OR WATER BALLAST TANK No.1
45'-0"
20'-0"
30'-0"
50'-0"
72'-6"
31'-6"
29'-3"
30 FRAME SPACING
27 FRAME SPACING
24 FRAME SPACING
LWL 427'-0"
No. 4 HATCH 30'-0"x20'-0"
ENGINE CASING
BOILER CASING
No.3 HATCH 20'-0"x20'-0"
DECK HSE.
No.2 HATCH 35'-0"x20'-0"
LAMP ROOM
No.1 HATCH 33'-9"x20'-0"
S.W.
UPPER DECK
T.H.
F.W. TANK COFFERDAM UNDER
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ENGINE & BOILER CASING
CO2 ROOM
MEAT
FISH
VEGETABLES
DAIRY
STORE ROOM
LINEN LOCKER
DRY STORES
SECOND DECK
DEEP TANK HATCH 15'-6"x8'-0"
DEEP TANK TOP
DEEP TANK No.3 P DRY CARGO, BALLAST, CARGO OIL OR FUEL OIL
DEEP TANK No.3 S DRY CARGO, BALLAST, CARGO OIL OR FUEL OIL
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FUEL OIL OR WATER BALLAST TANK No.1
FUEL OIL OR WATER BALLAST TANK No.5 P
FUEL OIL OR WATER BALLAST TANK No.5 S
TANK No.6
INNER BOTTOM

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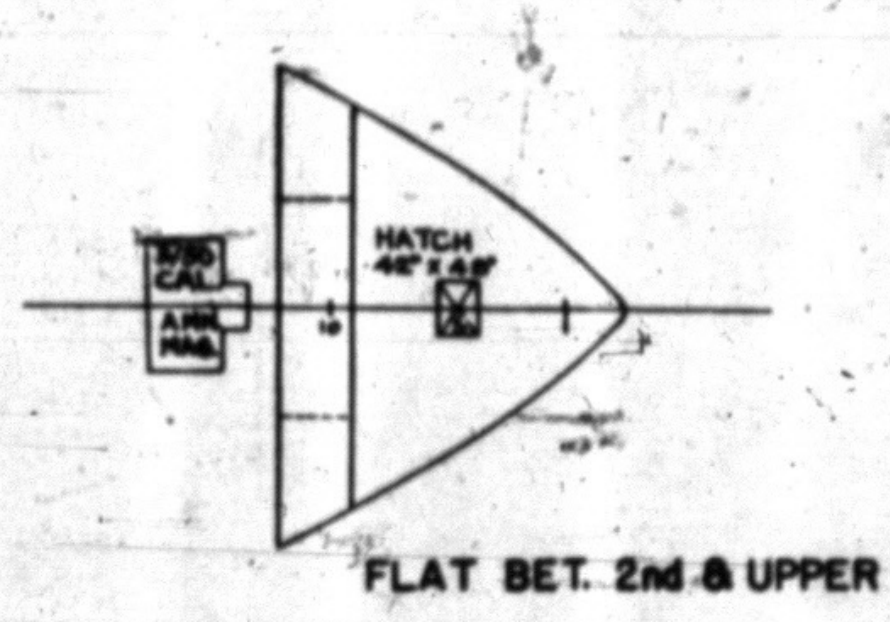

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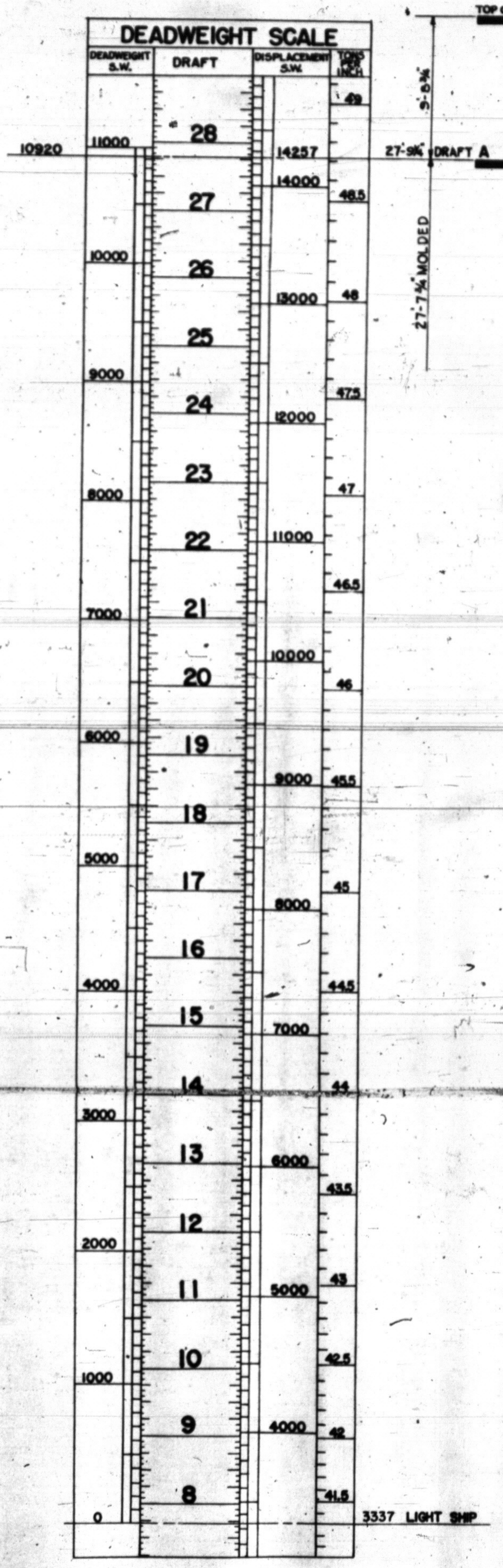
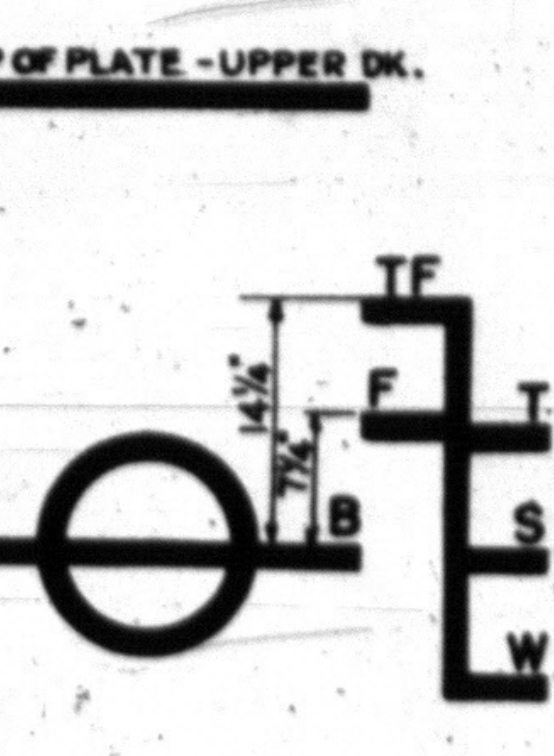
DEADWEIGHT SCALE





NOTE:
THE LIGHT WEIGHT OF THE SHIP INCLUDES THE 4" GUN AFT., 4-50 CALIBER MACHINE GUNS, 4-30 CALIBER MACHINE GUNS, 3"/50 CALIBER GUN FORWARD & AMMUNITION

DESIGN NO. EC2-S-C1

UNITED STATES MARITIME COMMISSION
EMERGENCY SHIP CONTRUCTION DIVISION

CAPACITY PLAN

SCALE 1/16" = 1'-0"
DATE APRIL 20, 1942

DRAWN P.F.P.
TRACED
CHECKED E.F.C.

APPROVED
APPROVED
APPROVED

BETHLEHEM-FAIRFIELD SHIPYARD, INCORPORATED
FAIRFIELD BALTIMORE, MD.

M.C.E. PLAN Nº 14-63 301-312 S29-1-1-1

APPROVED AS NOTED IN
M.C.E. LETTER DATED MAY 12-1942
M.C.E. FILE NO. S29
BY W. G. Esmond
BY